

out anodic protection chemical plant has to be oversized and best use is not made of materials.

The method has hardly been used in practice although it is simple to apply. This is probably partly due to an inadequate understanding of how the method works and a feeling that it is a laboratory curiosity. In

point of fact there is nothing more strange in protection by an anodic current than there is in protection by oxidising agents such as chromates, which are universally accepted.

There are of course dangers and limitations but, with adequate laboratory work and suitable instrumentations these do not amount to a serious objection to the technique.

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Properties of Platinum Metals and Alloys

AN ANNOTATED BIBLIOGRAPHY

The literature dealing with the properties of platinum and the platinum group metals is, on the whole, sparse and widely scattered. On this account a recent publication, called a "technical phase report", prepared by R. W. Douglass, F. C. Holden and R. I. Jaffee, of Battelle Memorial Institute for the U.S. Office of Naval Research, is particularly welcome. This was written with the special intention that it should serve as a guide to planning experimental work on the platinum group metals, "revealing", as the authors put it, "areas where concentrated study is needed and preventing duplication of previous work" and was produced as the first part of a study at Battelle of the metallurgical properties of the refractory platinum group metals.

As it is presented, this report provides a very careful survey of the literature of the past fifty years on the properties of the metals and on the constitution of their binary alloys, listing 281 references.

The review of this mass of literature extends to 105 pages and is reasonably comprehensive. The publication as a whole is likely to prove an invaluable source book to anyone interested in the literature of the platinum metals, but it is rather less valuable as a critical survey. The brief introductory notes on extraction and beneficiation are, for instance, misleading as far as modern conditions are concerned, for today South Africa is undoubtedly the most significant world source of the platinum metals. A few of the figures quoted for the physical and mechanical properties are certainly in error—at least as far as the pure metals are concerned—and need to be treated with much more reserve than is accorded them by the authors. However, if this is treated as a first-class annotated bibliography—which it primarily is—the report will be found a most useful work of reference by all interested in the platinum metals.

J. C. C.